

Claims

1. A method for transmission, in real time of a digitally represented data stream, having a first bit rate, comprising the steps of
 - 5 - compressing, at a first node (11,MS,53), by encoding the data stream, whereby a second bit rate, being considerably lower than the first bit rate, is obtained,
 - sending the compressed data stream through a packet-oriented connection (12,52,51),
 - 10 - decompressing the data stream at a second node (11,MS,53), whereby the first bit rate is regained,

characterized by the further steps of

 - supplying parity bits (CRC) to the data stream, at the first node, after the compression; whereby the data stream obtains a third bit rate, being slightly
15 higher than the second rate,
 - comparing, at the second node, said parity bits (CRC) in relation to the data stream for any discovery of erroneously detected data in the stream.
2. A method according to Claim 1, wherein one of the first and the second nodes is
20 a mobile station (MS) with a connection through a radio link (RL).
3. A method according to Claim 1 or 2, wherein the data stream, when being compressed, is divided into segments corresponding to time periods of a certain length, and for each segment a data block (SPB) is created, containing parameters
25 representing the data of the segment.
4. A method according to Claim 3, wherein the importance of the parameters, in relation to each other, has been graded and the position of the parameters in the data block is sorted according to importance.

5. A method according to Claim 4, wherein the parameters are divided into two classes, depending upon their importance, and where the parameters in the most important class are supplied with said parity bits (CRC) for error check.

5 6. A method according to Claim 3, wherein each parameter is represented, in the data block, by at least two bits with different significance, and the position of the two bits, in the data block, is sorted according to said significance.

10 7. A method according to Claim 6, wherein bits having a high significance is supplied with said parity bits (CRC) for error check.

8. A method according to claim 3, wherein the data stream constitutes digitally converted speech, the data block (SPB) is a speech block (SPB) and the parameters are speech parameters.

15 9. A method according to Claim 3, wherein the data stream is a digitally converted video signal.

20 10. A method according to Claim 3, wherein the data blocks (SPB) are sent to the second node (MS,11,53) even if the datablock (SPB) is erroneously detected during the sending.

25 11. An encoder unit (11) having means to receive a data stream having a first bit rate, and means to compress the data stream by dividing the data stream into segments corresponding to partial periods, and for each partial period create a data block (SPB) containing parameters representing the data in the corresponding segment, whereby a stream of data blocks (SPB) is produced having a second bit rate considerably lower than the first bit rate,

30 **characterized by**
means to sort the position in each data block (SPB) of the parameters being

part thereof, alternatively the bits being part thereof, according to a ranking order, specified in advance, based on the mutual importance of the parameters, alternatively of the bits, and

means to supply parity bits to the data block (SPB), for the discovery of errors occurring during transmission of the data block (SPB).

12. An encoder unit according to Claim 11, having means to speech-encode the incoming data stream when it represents speech.

13. An encoder unit according to Claim 11, having means to video-encode the incoming data stream when it constitutes a video signal.

14. An encoder unit according to Claim 11, having means to receive a stream of data blocks (SPB) with a third bit rate, and which contains parameters, means to identify parity bits (CRC) having been supplied to the data blocks (SPB), and to compare bits in the data block with said parity bits for error discovery, and means to decode the parameters and thereby create a data stream with a fourth bit rate, being higher than the third bit rate.

15. A mobile radio network (PLMN) with an encoder unit according to any of Claims 11-14.

16. A mobile radio network (PLMN) comprising
at least one stationary speech encoder unit (11) having a connection to a duplex PCM link, a connection to a packet-oriented link (12), having means to compress a stream of speech from the PCM link and pass it on, in compressed form, as a stream of speech blocks (SPB) through the packet-oriented link (12), and having means to receive, from the packet-oriented link (12), a stream of speech blocks, means to decode the speech blocks and forming a decompressed speech stream, being sent through the PCM link,

at least one base station (BTS) connected to the packet-oriented link and connected to at least one radio link (RL) having means to receive a stream of speech blocks (SPB) from the packet-oriented link and pass the stream of speech blocks (SPB) on through the radio link (RL), and having means to receive, from the radio link (RL) a stream of speech blocks and pass them on through the packet-oriented link (12), and

a mobile station (MS) having means to receive, from the radio link (RL) the stream of speech blocks (SPB), means to decode the speech blocks (SPB) forming a decompressed stream of speech, means to electrically register acoustic speech, means to compress the registered speech, at which speech blocks (SPB) are formed, and means to send the speech blocks (SPB) through the radio link, **characterized by**

means to provide, in the speech encoder unit (12) as well as in the mobile station (MS), created speech blocks (SPB) with parity bits, and

means to compare, in the mobile station (MS) and the speech encoder unit (11), the content of received speech blocks (SPB) with accompanying parity bits for possible error discovery, to be able to, when errors occur, hide the errors during the decoding of the received speech blocks (SPB).